

AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph [0003] with the following paragraph rewritten in amendment format:

The oxide based ceramic matrix composites (CMC) developed are economic, low dielectric, thermally stable, structural ceramic systems stable to at least 2300 °F. The matrix is reinforceable with a variety of fibers (Quartz, Nextel 312, 550, 619610, 650, 720). Preferably the fiber is, but not limited to, Nextel 720. The CMC's primary advantage over carbon–carbon and other high temperature composites is its low cost and near net-shape manufacturing process.

Please replace Paragraph [0029] with the following paragraph rewritten in amendment format:

Alumina-coated Silica Sol (1056, Nalco Chemicals) containing 20 30% solids of colloidal silica (SiO_2) coated with alumina (Al_2O_3) in water was mixed in a blender with submicron alumina powder (SM-8, Baikowski). The matrix contained 57 wt% of alumina-coated silica sol and 43 wt% of alumina powder. Several drops of nitric acid (about 0.1%) were added to the matrix to balance the pH. The matrix was then ball milled with alumina media for 4 hours before infiltrating into the fabric. The fabric was infiltrated by the same method as described in Example 1.

Please replace Paragraph [0030] with the following paragraph rewritten in amendment format:

Silica Sol (2327, Nalco Chemicals) containing 20 40% solids of colloidal silica (SiO_2) in water was mixed in a blender with submicron alumina powder (SM-8, Baikowski). The matrix contained 57 wt% of silica sol and 43 wt% of alumina powder. Several drops of nitric acid (about 0.1%) were added to the matrix to balance the pH. The matrix was then ball milled with alumina media for 4 hours before infiltrating into the fabric. The fabric was infiltrated by the same method as described in Example 1.